



The World Organisation for NDT

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CHAIRMAN'S MESSAGE

Harmonised standard would help meet manpower shortfall

The International Committee for Non-Destructive Testing (ICNDT) has entered into its sixth decade with as much or even greater enthusiasm than our founding father in 1955. The International Committee has become the recognised institution for our members and new members to base their NDT communities' 'terms of reference', policies and procedures, recommended certification programmes and a common desire for one certification programme.

One of the primary objectives that must be brought to the forefront of our Committee is 'global leadership' with respect to non-destructive testing certification. If ICNDT is to make a difference and support one NDT Certification Standard we need to take on this 'leadership' role. As a primary task of leadership we should address the role of an accrediting body for Certification Schemes. The subjectiveness and latitude of the ISO 9712 and ISO 17024 standards must be addressed. These two primary areas must not be used or allowed to take a position for a deviation or modification that would impact the overall intent of the ISO9712 standard. Although our schemes and implementation rules may be slightly different due to our cultures, the requirements of the standard must not be altered.

If, in fact, deviations or modifications are seen to be required by members of the NDT community and industry, would this not flag a concern with the respect to the intent of a common document? Would such concerns of the document not be seen as a justification to revisit these common areas? The conclusion may result in a re-evaluation of the outcome of the decision which in turn could bring us closer to the outcome that we are all waiting for! Could it be that the members of the committees, although quite knowledgeable in certification, are not the right individuals from industry to fine-tune the standards to obtain the mutual recognition required for one standard? Or is the present problem that the certification standards of NDT personnel cannot accommodate all the idiosyncrasies within our broad range of culture and community requirements?

My message is: as ICNDT Members 'global leaders' in the field of non-destructive testing we must take a position to assist the NDT Standards committee in ways and means to address the problems we are facing today in obtaining one harmonised standard for Qualification and Certification of NDT Personnel.

The problem of not having one standard has magnified over the last decade because of global marketing, increased safety regulatory requirements, ageing infrastructures, and cost-saving measures in manufacturing and technology advancements. Non-destructive testing as a trade, profession and/or career continues to move at a slower pace than the requirement of non-destructive testing in industry today. Combine the supply and demand shortage with our ageing workforce and the magnification of the problem grows tenfold. It is not hard to conclude that one harmonised standard would not only unify the standard of our profession it would assist in meeting the manpower shortfalls we see today through portability of certification.

As ICNDT members it is our responsibility to step up to the plate and assist our standard committee members to work towards the primary goal of ICNDT.

Douglas J Marshall



Past Chairman

Baldev Raj turns 60

Dr Baldev Raj, Honorary Member and Past Chairman of ICNDT, celebrated his 60th birthday on 24 April 2007. Douglas Marshall was pleased to have had the opportunity to attend the celebration not only as the ICNDT Chairman but as a personal friend of a very special man.

Dr Raj was honoured by his family, many of his peers, past mentors and friends including ICNDT members. The grand gala took place in a Beach Resort outside of Kalpakkam as no one



Baldev Raj (centre), sporting the fine Canadian native tribal bonnet presented to him by Douglas Marshall

hall could accommodate the friends of Dr Raj. The Canadian Institute for NDE presented Dr Raj with a Canadian native tribal bonnet symbolising friendship and honouring his role as a leader of people.

The memorable occasion coincided with the 2007 Imaging NDE Conference held in Kalpakkam, India. The International Workshop was supported by the International Committee for Nondestructive Testing and the inaugural address was given by Doug Marshall, as Chairman, during the opening ceremonies. The hosting and organising of the four-day workshop was provided by the Indira Gandhi Centre for Atomic Research along with a host of international institutions and universities.

The ICNDT Chairman offers his gratitude, especially to Dr Venkatraman and Mr V Pari for organising his participation during this most memorable occasion.

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ICNDT Journal



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The next ICNDT Journal will be published in March 2008

Material should be sent to the Publisher at the above address by 31 January 2008

NDT 2007 Conference and Materials Testing Exhibition

Organised by the British Institute of Non-Destructive Testing

**18 - 20 September 2007
Glasgow
Scotland
UK**

www.bindt.org
info@bindt.org

Future ICNDT Committee Meetings

PANNDT - Buenos Aires, Argentina - Executive Committee & PGP Committee, October 2007
17th WCNDT - Shanghai, China - Executive Committee, PGP Committee, ICNDT General Assembly, August 2008
10th APCNDT - Moscow, Russia - Executive Committee, PGP Committee, ICNDT General Assembly, June 2010

FAA penetrant studies yield interesting results

The USA's Federal Aviation Administration (FAA) has sponsored certain research efforts at the CASR (FAA Center for Aviation Systems Reliability) at Iowa State University and at Sandia laboratories. Some of the results of this work were discussed at a special meeting of CASR in Orlando, Florida, in conjunction with the Spring 2007 meeting of ASNT, and some of the work was the subject of technical papers at the ASNT meeting.

Developer studies

Two studies were made. The first of these concentrated on the use of dry developer in cloud chambers, and the second concentrated on a comparison of the several forms of developer. The results of the first study echoed what most inspectors already know, or what might be intuitive, but the study quantified this information. In summary, the brightest indications were achieved by the 'dip and drag' method. When a dust chamber is used, indications are brighter when the parts are oriented in the chamber with the cracks on top, less bright when the cracks are on the side, and the least bright when the cracks are

on the bottom. This is logical, because the developer powder can settle on the top of the part, but gravity prevents the powder from settling on the bottom or sides of the part. In addition to these findings, it was found that the several dust chambers tested were designed in such a way that there were areas in each where the developer coverage was poor.



Relative indication brightness was studied by the FAA

Discussions about this suggested that a scientific study of dust chamber design should be made, in order to determine how to build a more efficient chamber. Application of the developer by electrostatic means was not investigated, but will be pursued in the future, since this application may achieve similar results to the dip and drag method.

The second study compared the relative indication brightness resulting from the use of different forms of developer. CASR

is continuing to evaluate the results of this portion of the work, but in general the conclusions are that when compared to form 'a' dry powder developer applied by dip and drag, form 'b' soluble developer gives almost equivalent results when used at the manufacturer's recommended concentration, form 'c' suspendible developer gives superior results when used at the manufacturer's recommended concentration, and form 'd' alcohol-based aerosol developer gives the best results by a wide margin.

Form 'd' acetone-based developer does not give as good results as the alcohol-based. In comparison to form 'a' dry powder developer used in a dust chamber, applying the form 'a' developer by manual spray or by puffer bulb improves the results, but forms 'b', 'c' and 'd' still give far brighter indications.

The Federal Aviation Administration also conducted studies on emulsifiers, old *versus* new penetrant and drying after cleaning. Details of these may be found in the Spring 2007 issue of *Penetrant Professor* the newsletter of the Met-L-Chek Company, which is gratefully acknowledged here (www.met-l-chek.com).

Progress in the preparations for the 17th WCNDT

The 17th World Conference on Non-Destructive Testing and Exhibition is fast approaching. As the organiser, the Chinese Society for Non-destructive Testing (ChSNDT) sincerely welcomes all the NDT experts and personnel to attend this premier event.

The 17th WCNDT and exhibition will be held from 27-31 August 2008 at the Shanghai Exhibition Center (SEC) which is a centre for important political, economic, science & technology and cultural activities. Architecturally, the SEC is blessed with a unique character.

The SEC is situated in the centre of Shanghai, with easy access to transport facilities and nearby hotels, such as the Rendezvous Merry Hotel Shanghai (4 star), the Shanghai Shanxi Business Hotel (4 star), the Garden Hotel Shanghai (5 star) and the Shanghai JC Mandarin (5 star).



Shanghai Exhibition Center

ChSNDT is pleased with the progress made in the preparation of the 17th WCNDT. To date 11 international sponsors, including main sponsor GEIT, and 10 national sponsors have signed up to participate in the conference. Over 100 exhibitors will be in attendance for the exhibition and almost 80% of the exhibition booths have been reserved. There is a plan to open a new area for some new exhibitors who may want to participate in the future.

Meanwhile it is also hoped that more and more NDT personnel will actively submit their abstract and paper to our website: www.17wcndt.com or to our e-mail: chsndt2008@163.com

The organiser of the 17th World Conference on Non-Destructive Testing has decided to postpone the deadlines for abstract and paper submission until:

Receipt of abstracts: 31 December 2007, notification of acceptance: 31 January 2008
 Receipt of papers: 30 April 2008, notification of acceptance: 31 May 2008

The welcome dinner will be held at the Shanghai International Convention Center. Located in the heart of Lujia zui – Shanghai's

Financial & Trade Zone and southwest to the Oriental Pearl TV Tower – this is accessible from all parts of the city by various modes of transportation. The Shanghai International Convention Center is well-known – the 99 Fortune Global Forum and 2001 APEC Economic Leaders' Meeting were held there with great success.

In addition, a concert or an opera will be held in the Shanghai Grand Theatre, which is also a very beautiful architectural structure situated in the centre of Shanghai.

The 17th WCNDT will be held after the Olympic Games in Beijing. It is a good opportunity for the NDT experts and scholars get together in Shanghai, China

to exchange their NDT knowledge and technologies. Let the world understand China's NDT and let China's NDT move towards the world!

Registration for participants is now open. All fees are in US \$ and the registration fee includes access to the entire conference programme, access to the exhibition, coffee, welcome dinner, abstracts booklet and proceedings CD-ROM and travel on the Huangpu River. The accompanying person fee includes participation in the opening ceremony, welcome dinner and travel on the Huangpu River.



Shanghai International Convention Center



Shanghai Grand Theatre

	Receipt of payment until 26 Feb 2008	On-site or after 26 Feb 2008
Participant	US \$710	US \$750
Student	US \$350	US \$380
Accompanying person	US \$180	US \$180



*Let the world understand China's NDT
Let China's NDT move toward the world*



17th World Conference on Non-destructive Testing & Exhibition

www.17wcndt.com

Receipt of abstract until Dec.31,2007
Receipt of paper until Apr.30,2008



ASIA-PACIFIC

Call for Papers

The 13th Asia-Pacific Conference on Non-Destructive Testing November 8-13, 2009, Yokohama, Japan



APCNDT

Invitation

The Japanese Society for Non-Destructive Inspection (JSNDI) is pleased to invite you to the 13th Asia-Pacific Conference on Non-Destructive Testing (APCNDT) to take place in Yokohama, Japan on November 8-13, 2009. In these times of fast world's development, non-destructive testing technology has been continued through APCNDT since 1976. The conference will provide the possible opportunity for exchanging and sharing advanced knowledge in non-destructive testing, and making new friends to encourage NDT techniques.

Dr. Norikazu Ooka, Chairman
The 13th Asia-Pacific Conference on Non-Destructive Testing 2009

Dr. Hiroshi Kato, President
The Japanese Society for Non-Destructive Inspection

Venue

The APCNDT will be held at PACIFICO Yokohama, the world-class convention complex. Yokohama is located in Honshu, the main island. Yokohama sits on the western coast of the Tokyo Bay and lies a mere 30 kilometers (18.6 miles) from Tokyo, the capital of Japan. Yokohama has easy access to international airports and also to any cities in Japan. The City of Yokohama is a beautiful resort and port city located on the Tokyo Bay, where you discover the truly Japanese beauty to the futuristic view of the waterfront skyscrapers.



Key Dates

April 30, 2009	Short-Abstract Submission
July 1, 2009	Acceptance Notification
August 31, 2009	Extended-Abstract Submission
August 31, 2009	Advanced Registration
November 8-13, 2009	Full-Paper Submission

Session Topics

APCNDT 2009 welcomes papers on all aspects of non-destructive testing and evaluation, including the following topics.

1. Fundamental and applied research
2. Equipment design and development
3. Inspection and testing application
4. Codes and standards
5. Training, education, qualification and certification
6. Materials characterization
7. Safety and reliability
8. Security
9. Bio-medical applications
10. Others

Abstract

■ Short Abstract

Short abstract should contain paper title, keywords, names and affiliations of all authors.

■ Extended Abstract

Extended abstract should be prepared on one page in paper standard A4 (21cm x 29.7cm) size, containing paper title, keywords, names and affiliations of all authors, text, figures and tables. Comprehensive instructions and format of the extended abstract are available on the conference website.

Short and extended abstract must be submitted on-line.

Proceedings

All delegates will receive a copy of the extended abstract proceedings. Authors are asked to submit full papers which will be collected at the conference. Papers will be subject to peer review and published in an international journal.

Registration

All delegates will be requested to make on-line registration. On-line registration form will be available at the conference web site.

Sponsors

If you are interested to be a sponsor of APCNDT 2009, please contact the following conference secretariat. Your cooperation is very important!

Secretariat

The Japanese Society for Non-Destructive Inspection (JSNDI)
MBR99 Building, 67, Kanda-sakumagashi, Chiyoda-ku,
Tokyo 101-0026 Japan
Tel: +81-3-5821-5105
Fax: +81-3-3863-6524
Email: apcndt2009@jsndi.or.jp
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EUROPE

ASME NDE Founder's Award presented to Mike Farley

President of ASME (the American Society of Mechanical Engineers), Sam Zamrik, presented Mike Farley of Doosan Babcock with the prestigious ASME NDE Founder's Award at the Honours Lunch during the Pressure Vessel and Pipework Division Conference in San Antonio, USA on 26 July 2007.

The award was in recognition of Dr Farley's work in the NDE field with Doosan Babcock and its predecessors, including his work for EFNDT and ICNDT.



ASME President Sam Zamrik (left) presents Mike Farley with the ASME NDE Founder's Award in the presence of Terry E Shoup (right)

Sam Zamrik's objectives for his term of office include increased co-operation with related international bodies and Dr Farley was able to introduce some ideas for co-operation with the European Federation for NDT in the area of personnel training and qualification, with the twin objectives of improving standards and reducing expensive duplication.

6th International Conference on NDE in Relation to Structural Integrity for Nuclear and Pressurised Components

Coordinated by the EC Directorate General Joint Research Council (JRC)

8-10 October 2007

Hilton Budapest, Budapest, Hungary

www.6thnde.com

Leonardo Project bears fruit

The European Programme of Training for the Qualification of Non-Destructive Testing Personnel is a project framed within the pilot programmes of Leonardo Da Vinci communitarian action of the European Union in the field of professional training.

The Promoter of the project is the National Centre of Vocational Training Cartagena (CNFPO), (Murcia), Spain and participating partners are the Spanish Society for Non-Destructive Testing (Madrid), the German Society for Non-destructive Testing (Berlin), the British Institute of Non-Destructive Testing (Northampton) and the French Society for Non-Destructive Testing (Paris).

The project, which commenced in 2005 with the objective of developing comprehensive training materials for students and trainers, published in English, Spanish, German and French, has produced a series of training handbooks in these languages at levels 1, 2 and 3 in five NDT methods: Penetrant Testing, Magnetic Particle Testing (one Guide each), Eddy Current Testing (three Guides), Ultrasonic Testing and Radiographic Testing (two Guides each).

The teacher's guide provided separately is designed to assist the teacher in the performance of theoretical and practical training sessions as well as in the performance of evaluations.

The intention is to provide a common document for education and study, reinforcing the harmonisation obtained through the certification standards ISO 9712 and EN 473.



Further details of the availability of the Handbooks will be announced soon via the EFNDT and individual societies' websites and other media.

NDT and Diagnostics for

EF NDT 1TH SAFETY ECNDT

Moscow 2010, June 7 - 11





DEUTSCHE
GESELLSCHAFT FÜR
ZERSTÖRUNGSFREIE
PRÜFUNG E.V.

sponsored by



**Lavender
International**
non-destructive testing

CERTIFICATION 2007

Final programme and
registration available at:
www.certification2007.info

5th International Conference on Certification and Standardization in NDT September 26-27, 2007, Berlin, Germany

The conference will be of interest to:

- quality and NDT management in industry • accreditation bodies • certification bodies
- NDT laboratories • inspection bodies in all industry sectors • regulators in all fields where NDT is vital • insurance bodies and classification societies • NDT training and qualification organisations • engineers involved in specifying NDT • contributors to NDT and product standards • specialists involved in setting up new certification systems and • those engaged in the development of existing certification systems

General

Venue WISTA-MANAGEMENT GMBH
Adlershof con.vent.
Rudower Chaussee 17
12489 Berlin, Germany

Hotels We have special conditions in the following hotels (**Code: Certification**)

- Ibis Adlershof Berlin (walking distance)
- Courtyard by Marriott Köpenick
- Best Western Michels Hotel am Schloss Köpenick

Reservation forms on the website
www.certification2007.info

Exhibition

The conference will be accompanied by an exhibition. For interested companies we offer a poster wall and a table to present their company.

Fee: 100 € plus VAT (in the fee entrance to the conference is not included).

To place your order please contact the Conference Secretariat (tagungen@dgzfp.de).

Sponsorship

Are you interested in becoming a „Certification 2007 sponsor“? Please contact the Conference Secretariat.

Organization

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Max-Planck-Straße 6
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www.certification2007.info

Programme Committee

Chairman: Ulrich Kaps, Germany
Dr. Michel Poudrai, France
John R. Thompson, United Kingdom

Conference language

All technical papers will be presented in English, simultaneous translation will not be provided.

Participation fees

Speaker	€ 440,-
Participant	€ 520,-
Participant day ticket	€ 300,-
Additional Proceedings (CD)	€ 25,-
Additional Conference Evening	€ 75,-

PAN-AMERICA

ASNT offers the NDT community several opportunities for learning, exchanging and networking

ASNT's Fall Conference and Quality Testing Show, Call for Abstracts for the 17th Spring Symposium and Conference, and Aerospace Conference provide avenues for the NDT community to network, learn, exchange information and conduct business. ASNT encourages and invites the global NDT community to participate in its programmes and volunteer activities.

The Fall Conference and Quality Testing Show 2007 is being held in Las Vegas, Nevada, USA, 12-16 November. What happens here will go everywhere in the NDT industry. This annual event will bring together NDT focused individuals from around the world who can select from more than 120 papers covering relevant topics that range from ground penetrating radar to infrastructure, health monitoring and ultrasonic phased



R K Stanley

arrays. Attendees will see the Quality Testing Show with its over 100 exhibitors demonstrating the latest in NDT equipment and services. The Quality Testing Show is said to be the world's largest annual tradeshow dedicated to non-destructive testing. Attendees can tour the Yucca Mountain Repository which is the United State's first long-term geologic repository for spent nuclear fuel and high-level radioactive waste. Short Courses on electromagnetic testing; techniques, tips and tricks: operating a modern radiometric thermal imaging camera; and understanding NADCAP are scheduled. The Mehl Honour Keynote Lecture is being given by Dr Rod Stanley, who has been involved in the research and development of tools used in oilfield tubular inspection for over thirty years.

The Fall Conference provides many opportunities for NDT students as well. There is a student poster presentation contest with cash prizes, an employment and interview programme, and session monitoring slots available. For the complete programme, activities and registration details visit <http://www.asnt.org/events/conferences/fc07/fc07.htm>

If you want to present your work at an ASNT event there are

two immediate opportunities to submit abstracts for consideration. The Society is accepting abstracts for the 17th Annual Research Symposium and Conference scheduled for 31 March to 4 April 2008 in Anaheim, California, USA. Abstracts should be submitted before 19 October and desired topics include NDE of composite repairs, automated inspection systems, materials characterisation, structural health monitoring, civil structures and marine/shipbuilding.

If your particular focus is aerospace NDE, ASNT will be hosting the Nondestructive Evaluation of Aerospace Materials and Structures Conference in St Louis, Missouri, USA, 9 and 10 June 2008. Abstract submission for consideration is due by 31 October. Submission information and requirements are provided on the ASNT web site www.asnt.org. From the homepage click on the 'Meetings and Events' link and select the conference in which you have interest.

Whether you are interested in new NDT/NDE equipment, applications or techniques; presenting your research on a new technique or solution, networking with industry leaders, or volunteering for an ASNT committee, the Fall of 2007 promises to provide open avenues for members of the NDT community to participate.

If you are looking for the latest in ultrasonic testing publications, on the shelf among ASNT's NDT publications is fifth in the series of method *Classroom Training Books*, the recently published ultrasonic testing (UT) book is one of the *ASNT Personnel Training Publications*. This volume covers Level I and Level II material. It features a fundamental introduction to UT, qualification and certification information, basic principles of acoustics and ultrasonics, transducer operation and theory, testing techniques, calibrating transducers, ultrasonic testing applications and evaluation standards.

Also, now available is the *Nondestructive Testing Handbook, third edition: Volume 7, Ultrasonic Testing*. With an editorial emphasis on practicality, the 600-page volume represents a collaborative effort of 100 experts in the field. Information is included that is useful to Level II and Level III inspectors. Chapters correspond to ASNT's industrial committees: Aerospace, Chemical-Petroleum, Electric Power, Infrastructure, and Metals. Other chapters cover applications in material characterisation and advanced materials. Metric units are provided throughout and all alloys are identified in the Unified Numbering System. The *UT Handbook*, which has 467 Figures, includes hundreds of pages on twenty-first century applications. In addition to the hardbound volume, the publication will be available on CD-ROM. The CD-ROM will feature these enhancements: QuickTime video, a powerful search function with every word electronically indexed, and extensive linking to all points within the text. Visit ASNT's online bookstore, ShopASNT, for more details and purchasing information.

Whether conferences or publications, ASNT is dedicated to providing the NDT community with the resources needed to meet current challenges.

Summary of future ASNT events

12-16 November 2007

31 March – 4 April 2008

9-10 June 2008

Fall Conference and Quality Testing Show

17th Annual Research Symposium and Conference

Nondestructive Evaluation of Aerospace Materials and Structures Conference

Las Vegas, Nevada

Anaheim, California

St Louis, Missouri

www.asnt.org

ABENDE takes part in international study group on digital radiography

ABENDE is currently participating in a study group for the development of a project on Industrial Digital Radiography. The subject investigation was an initiative by the International Atomic Energy Agency (IAEA), with headquarters in Vienna, Austria. The agency sent representatives from several developing countries with associations of non-destructive testing to participate in the studies.

With this project, IAEA intends to create new, low-cost, readily available and simple technologies and methodologies in digital techniques. Procedures will be developed, together with an instruction and qualification protocol on non-destructive tests applied to digital Radiography.

In addition to Brazil, other countries participating in this group include: Germany, Argelia, Argentina, Canada, India, Israel, Malaysia, Pakistan, Rumania, Uzbequistan and Uruguay.

The first meeting took place between 11 and 15 June, in the Institute for Materials Characterization Investigation and Testing – BAM (*Bundesanstalt für Materialforschung und -Prüfung*), in Berlin, Germany. ABENDE was represented by investigator Gabriela



Representatives from several countries participate in the group

Ribeiro Pereira, from the Nuclear Instrumentation Laboratory of Alberto Luiz Coimbra Institute of Graduate Studies in Engineering from the Federal University of Rio de Janeiro (COPPE/UFRJ).

Almost one thousand people participate in the 9th COTEQ

A total success, the 9th COTEQ (International Conference on Equipment Technology) closed with almost one thousand participants. 647 participants gathered during the four-day conference (12 to 15 June in Salvador, Bahia). There were 169 presentations in 32 booths of Brazilian and international companies. The remainder of the public was made up of visitors, speakers, writers of technical papers and exhibitors. Among the presentations we highlight the opening conference 'Alternative Sources of Energy and the Future Impact in the Oil and Gas Market', presented by Mozart Schmitt de Queiroz, executive manager, Power Development at Petrobras. During the second day, the conference 'Risk Management in Petrochemical, Nuclear, Thermal and Hydroelectric Power Plants', by Brian Cane, from TWI, England, showed that Brazil should go on investing in nuclear power plants. Also to be highlighted were the several debates held during the conference, one of the subjects addressed was the 'Hydrostatic Proof' whereby



Almost one thousand people attended the meeting

participants showed that this is still a controversial subject. At the end of the meeting, awards were given to the best papers presented and to the winners of the Photography Contest. The next edition will take

place in 2009; with the headquarters to be defined at a later date. The pictures of the 9th COTEQ can be seen at the site: www.abende.org.br/coteq.html

The meeting was sponsored by ABENDE, by the Brazilian Institute of Oil and Gas and Biofuel (IBP) and by the Brazilian Association of Corrosion (ABRACO).

Study group on inspection in the electricity sector

ABENDE is organising the Technical Commission of Inspection for Power Transformers and Reactors, directed to the Electrical Sector. The idea to create this study group came up in April, during the course 'Integrity, Monitoring and Diagnosis of Power Transformers and Reactors', promoted by ABENDE and PASA. Those interested in taking part in the commission should contact Silvana Mayer in the Shared Services Sector by e-mail silvana@abende.org.br or by telephone (+55 11) 5586-3194.

Brazilian NDE pioneer dies at 86

We deeply regret to inform the death of Professor Paulo Gomes de Paula Leite, on Saturday, 7 April 2007. He was the pioneer and senior champion of Non-Destructive Tests in Brazil, having worked for more than 50 years in Rio de Janeiro's Navy Arsenal. His main objective was to introduce X-rays in pieces of equipment, in addition to disseminating NDE in several public and private entities. He



Professor Paula Leite wrote the first END book published in Brazil

also wrote the first NDE book published in Brazil by the Brazilian Association of Metallurgy and Materials – ABM. He was an honorary and founding member of ABENDE and, since 1991, the Award to the best technical paper presented at ABENDE is named after him, in his honour – this is now a traditional award, a great incentive to creativity and to the development of new techniques.

Qualification and certification for the steel sector

ABENDE's National System of Qualification and Certification (SNQC/END) started 15 years ago, based on the system SEQUI/Petrobras. During this period, Brazil went through several changes, among them increased exports and imports. The new reality led Brazil to have more involvement with standards, specifications and regulations from several countries.

Ever since the SNQC/END was created, the ISO-9712 standard has been used; this is currently the main NDE qualification standard used all over the world. However, due to their specific features, some segments face difficulties when trying to enforce this Standard, chiefly in terms of its application to the inspection of automated process.

During recent years, ABENDE, with an eye on the ever more dynamic and diversified market, is creating certification systems to meet the needs of specific sectors, as is the Standard that is currently being developed by the Steel Committee for professionals who operate automatic equipment based on ISO 11484.

ABENDE is also committed to meeting the needs of important segments in the country, which provide the raw material to several

industries: companies producing rolled forged and cast products. The Steel Sector Committee is preparing a system framework to qualify and certify personnel in cast, forged and rolled steel. In order to meet this specific need, a Complementary Document was created (DC-018) and approved by the Certification Board.

This year, the SENAI/Contagem unit is expected to be acknowledged as a Center of Qualification Testing (CEQ) for the current tests, with applications directed to products welded with the techniques of Liquid Penetrant and Magnetic Particles. Examinations based on Liquid Penetrant, Magnetic Particles and, most importantly, Ultrasound directed to cast and forged products are expected to start in 2008.

With the creation of a qualification and certification system dedicated to the areas of cast, forged and rolled products, ABENDE will contribute to this important segment of the industry, improving the quality and competitiveness of our companies, in Brazil and abroad.

Change in the renewal and recertification rules

Many comments and criticisms have been submitted to the certification sector at ABENDE as far as the obligation of the recertification tests. Even though these observations are deemed coherent, ABENDE needs to maintain the requirement relative to the recertification tests, since this is one of the accreditation requirements of ISO 9712 international standard, a document that confers ABENDE international acknowledgement and accreditation by INMETRO. Several proposals are currently being studied in international forums, but our association will only be able to change such rules after the standard at issue is approved and reviewed.

For some certified professionals, the good news is the two recently approved decisions: As far as the certificate renewal is concerned, the board decided that, from now on, level 3 certified professionals who maintain level 2 certifications and who have completed their first period of certification (five years) may apply for certification to renew level 2 and do not need enforce the DC-013 document. This document defines the requirements to obtain the score required for certification renewal, such as: participation in training courses, events and seminars. The full text of the DC-013 document is available at ABENDE's site. The decision was handed down by the Certification Board.

Another important decision relates to the recertification tests. Professionals have often complained about the way tests are held, and according to the previous rule, suspension of the testing and re-testing amounted to annulment of the certification, forcing professionals to start a new certification process. With the change, professionals will be allowed three attempts to obtain approval, ie one test and two re-tests. This change was made possible due to a review of the ISO-97112 standard.

STANDARDISATION

Work group created to deal with the standardisation of sub-aquatic sector

The Ultrasound Study Commission has created a standardisation study group to develop the Brazilian standard to describe the method of evaluation of equipment used to measure thickness by Ultrasound sub-aquatic inspections. Currently, the group is made up of the companies Petrobras, Bodycote Brasimet, Marno, Siemens, Oceanica and Eletronuclear. Those interested in participating in the project should contact the standardisation sector on tel: (+55 11) 5586-3195/3145 or e-mail: normalizacao@abende.org.br

President of ABENDE's Board of Directors is the chairman of ISO's Secretary

The president of the Board of Directors at ABENDE, Pedro Feres Filho, was elected chairman (accountable for the coordination) of the Secretary's sub-committee (SC-09)/Acoustic Emission of the Technical (TC 135) at ISO, recently won by the Brazilian Association of Technical Standards (ABNT). The new challenge faced by ABNT is part of the new policy for international participation of this institution as a standardisation agency.



Pedro Feres

Secretary of ISO/TC 135/SC 9 Acoustic emission testing

The Brazilian Society for Technical Standards (ABNT) has nominated Mr Cláudio Guerreiro as the secretary of ISO/TC 135/SC 9, Acoustic emission testing. Relevant persons are kindly requested to register him as the secretary of SC 9.

His contact address is as follows:

Mr Cláudio Guerreiro
Secretary, ISO/TC 135/SC 9 Acoustic emission testing
Secretariat: ABNT

Address: Co-ordinator of International Standardisation
Associação Brasileira de Normas Técnicas
A 13 de Maio, no 13, 28º andar
BR-20003-900 Rio de Janeiro-RJ
Brazil

Tel: +55 21 3974 2329

Fax: +55 21 2220 1762

E-mail: claudio.guerreiro@abnt.org.br

Forthcoming NDT events in Brazil

NDT Offshore
12-13 September 2007
Macaé, Rio de Janeiro

2nd Forum on New NDT Technology
21-23 November 2007
São Paulo

www.abende.org.br
eventos@abende.org.br



**IV Pan-American Conference for Non Destructive Testing
IV Conferencia Panamericana de Ensayos No Destructivos
Buenos Aires, Argentina**

October 22 to 26, 2007 - 22 al 26 de Octubre de 2007

The 4th Pan-American Conference for Non-Destructive Testing will be held at the Panamericano Buenos Aires Hotel and Resort on 22-26 October 2007.

Major scientific and technical breakthroughs in the area of NDT will be displayed.

The Conference is organised by the Pan American Committee for Non Destructive Testing, which gathers NDT organisations from all over the Americas, in cooperation with the International Atomic Energy Agency (IAEA) and the International Society for Optical Engineering (SPIE).

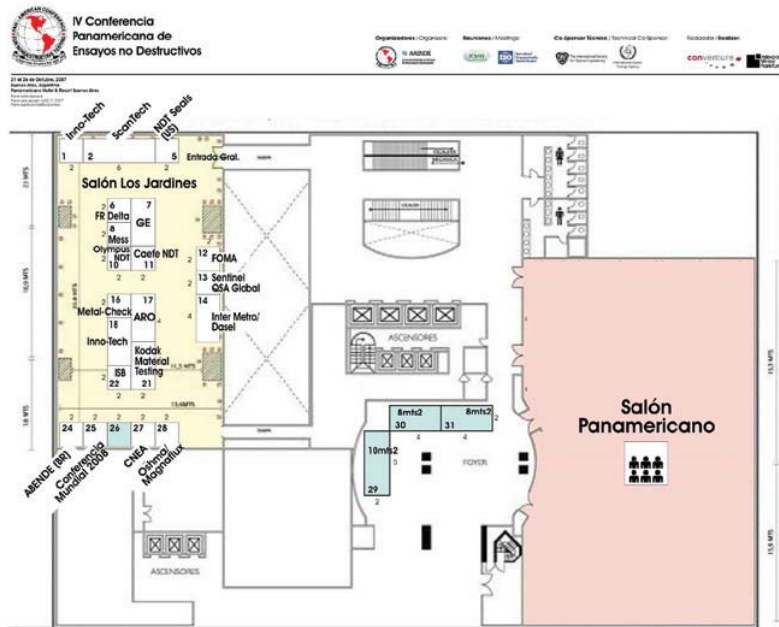
Four events will be held in parallel: the 6th Regional Congress of Non-Destructive and Structural Testing (CORENDE), the meetings of the ISO TC-135 (Technical Committee No 135 of the International Standardization Organization), the meeting of the Policy and General Purposes Committee of the International Committee for Non-Destructive Testing (PGP – ICNDT) and the MERCOSUR Standardization Meeting.

Major international players of international prestige will meet at this outstanding event, which will deal with a range of subjects related to NDT. The following plenary conferences are some of the items on the agenda:

- ❑ Human-like Robotic Inspectors – Science Fiction and Reality, by Yoseph Bar-Cohen, Advanced Technologies and NDEAA Lab NASA – Jet Propulsion Laboratory Pasadena, California, USA.
- ❑ Steam Generator Inspections: Faster, Cheaper and Better. Are we there yet? by Laura Obrutsky, an expert in induced currents, currently working at Atomic Energy of Canada.
- ❑ Progress in NDT System Engineering Through Sensor Physics and Integrated Efficient Computing, by Professor M Kröning, from the Fraunhofer Institute of Germany.
- ❑ Survey and Testing Through Interferometric Radar: Applications to Cultural Heritage and Public Utilities, by Maximiliano Pieraccini, from the University of Florence, Italy.
- ❑ Technological System – from the Well to the Gas Station, by Fabio Jobim Sartori from Material, Equipment and Corrosion Technology, Petrobras R&D Center, CENPES, Brazil.
- ❑ The Validation of Inspection Systems via Non Destructive Testing. Origin, Evolution and Current Status, by Gustavo Bollini, from TECNATOM, Spain.
- ❑ IR Thermography: A Multifaceted Technique for Non-Destructive Evaluation, by Daniel L Balageas, Scientific Advisor Emeritus – ONERA, Cedex, France.
- ❑ Guided Waves. Rigid Riser Test Battery Evaluation, by Francisco Carlos Rodrigues Marques, Petrobras, Brazil.
- ❑ ISO Awareness, by Frack Perrand, ISO Secretary General, France.

Another item worth highlighting will be the lectures and poster sessions, with more than 130 papers received from 32 countries,

dwelling on subjects from the range of industries related to NDT. All activities will have simultaneous translation.



An exhibition will be held together with the technical presentations, with the participation of NDT product and service companies. Up to the present time, more than 30 companies from different countries have confirmed their attendance. Brazil will be represented by ABENDE; Inno-Tech; Inter.-Metro Servicios Especiales; Metal-Chek do Brasil; Oceaneering Inspection, which is a Silver Sponsor of the event; Kubika and the Scan Tech company. The United States will be represented by Micron Optics; NDT Seals; Olympus NDT; Pan American Industries and Sentinel QSA Global Inc. The following companies will also be present: APPLUS RTD from the Netherlands; DASEL from Spain; FOMA BOHEMIA from the Czech Republic and M2M from France. Local agencies and organizations such as CITEFA, CNEA, UTN-Facultad Regional Delta and companies such as ARO, Auditec/Sonatest, Caefe NDT (Silver Sponsor), DV Ingeniería, ISB Medios de Elevación, Kodak, Material Testing, Meditecna, MESS, Oshma/Magnaflux, Tenaris (Platinum Sponsor), Viditec SA and SI Termografía Infrarroja/CEDIP Infrared (Argentina – France) will also be present.

And, finally, there will be a special venue to promote the World Conference in China and the V PANNDT in Mexico.

The event is sponsored by Agencia Nacional de Promoción Científica y Tecnológica (the National Scientific and Technological Promotion Agency), Tenaris Siderca and the following companies: NDT Net, CAEFE, Oceaneering, N.A.S.A. and Tecnatom.

The fee to register for the Conference will be between USD 280 and USD 495. The website for registration is www.panndt.org

CALENDAR OF NDT EVENTS

Month	Date	Venue	Event	Contact
September 2007	4-5	Kuala Lumpur Malaysia	3rd NDT & Corrosion Management Asia Conference & Exhibition	zaman@safan.com www.safan.com
	17-20	Glasgow Scotland	NDT 2007 Conference and Materials Testing 2007 Exhibition	conf@bindt.org www.bindt.org
	26-27	Berlin Germany	5th International Conference on Certification and Standardisation in NDT	tagungen@dgzfp.de www.certification2007.info
October 2007	1-5	Yalta Ukraine	15th International Conference and Exhibition 'Modern Methods and Means of NDT and Technical Diagnostics'	office@conference.kiev.ua www.conference.kiev.ua
	8-10	Budapest Hungary	6th International Conference on NDE in Relation to Structural Integrity for Nuclear and Pressurised Components	marovisz@marovisz.hu www.6thnde.com
	11-13	Milan Italy	Italian National Conference on NDT	aipnd@numerica.it
	11-14	Chania Crete	4th International Conference of the Hellenic Society for NDT	hsnt@hsnt.gr www.hsnt.gr
	22-26	Buenos Aires Argentina	4th Pan-American Conference on Non-Destructive Testing (PANNDT)	info@aaende.org.ar www.aaende.org.ar
November 2007	5-9	Prague Czech Republic	4th Workshop 'NDT in Progress', International Conference 'NDE for Safety', 'Defektoskopie 2007' and NDT Expo	www.cndt.cz/endtd07/
	12-16	Las Vegas USA	ASNT Fall Conference and Quality Testing Show	www.asnt.org
	27-30	Kiev Ukraine	Exhibition 'Patterns, Standards and Instruments'	silova@iec-expo.com.ua www.tech-expo.com.ua/eng/pz
	28-30	Vadodara Gujarat, India	NDE-2007 – Indian National Seminar and Exhibition on NDE	nde@nde2007.com www.nde2007.com
December 2007	2-5	Kingdom of Bahrain	4th Middle East Nondestructive Testing Conference & Exhibition 2007	bseng@batelco.com.bh www.4mendt2007.org
April 2008	17-19	Istanbul Turkey	3rd International Symposium and Exhibition on NDT	oda@metalurji.org.tr www.metalurji.org.tr
May 2008	25-30	Jerusalem Israel	Art2008 – 9th International Conference on NDT, Microanalysis and Preservation in the Conservation of Cultural and Environmental Heritage	meetings@isas.co.il www.isas.co.il/art2008
August 2008	26-30	Shanghai China	17th World Conference on NDT	chsndt@public2.sta.net.cn chsndt2008@163.com www.17wcndt.com
November 2009	8-13	Yokohama Japan	13th Asia-Pacific Conference on Non-Destructive Testing 2009	apcndt2009@jsndi.or.jp www.apcndt2009.com
June 2010	7-11	Moscow Russia	10th European Conference on NDT	spektr@co.ru www.rsnttd.ru
2012		Durban South Africa	18th World Conference on NDT	amanda.vdwesthuizen@andtc.com